

ABSTRACT OF THE DISCLOSURE

A coating method for a internal member having holes in a vacuum processing apparatus is provided. The method includes a process (A) of filling small holes 78 of the internal member 81 with padding plugs 20 each of which has a core member 22 made from a metal material and a metal-resin composite layer 24 covering the circumferential surface of the core member 22, the metal-resin composite layer 24 being a complex consisting of a metal material and a resinous material exhibiting nonconjugative property to a coating film 80, a process (B) of forming the ceramic coating film 80 on the surface of the internal member 81 by plasma spraying after the process (A) and a process (C) of extracting the padding plugs 20 out of the holes 78 after the process (B). By this coating method, it becomes possible to solve various problems about the technique of filling the holes with the pudding plugs, so that a coating film superior in its quality performance can be produced effectively.